REMARKS

Applicant respectfully requests favorable reconsideration of this application, as amended.

The drawings were objected to as not disclosing the intumescent material in an expanded state, and Figures 1B and 2B have been added as suggested by the Office Action. Support for these figures may be found in the Specification at Paragraphs 0008 to 0015, 0020 to 0026, 0028 to 0032, etc. Additionally, Paragraphs 0028, 0029, 0031 and 0032 have been amended to comport with new Figures 1B and 2B. No new matter has been added, and Applicant submits that the drawing objection has been overcome.

Claims 32–37 were rejected under 35 U.S.C. § 112, 1st paragraph, as failing to comply with the enablement requirement. Applicant notes that new Figures 1B and 2B clearly depict the areas into which the intumescent material volumetrically expands, and submits that the enablement rejection has been overcome.

Claims 32–37 were rejected under 35 U.S.C. § 112, 2nd paragraph, as being indefinite, and Claims 32, 35 and 36 have been amended in response. Support for these amendments may be found, for example, in the figures and the Specification at Paragraphs 0028 to 0032, etc. No new matter has been added, and Applicant submits that the indefiniteness rejections have been overcome.

Claims 32–37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Thomas (US 4,867,496) in view of Saino (Pages 6–8). In the interests of securing an expedited Notice of Allowance, and without acceding to the rejections, Claim 32 has been amended to include the features recited by Claim 33, which has been canceled accordingly. Claim 34 has been amended for clarity, and Claim 38 has been added. Support for these amendments may be found, for example, in the figures and the Specification at Paragraphs 0028 to 0032, etc. No new matter has been added, and Applicant submits that none of the cited references, taken singly or in combination, teaches or suggests all of the features recited by the pending claims.

Applicant respectfully submits that neither Thomas nor Saino discloses an intumescent material, having an expansion temperature, positioned on the inner wall of the housing proximate to the armature, as recited by Claim 32. To the contrary, as discussed below, Thomas's metal ball 44 is translationally disposed within an opening 47 of a cylindrical cavity in

case 9, while Saino's intumescent means 47 is positioned within cavity 36. Moreover, none of the remaining references cure these deficiencies.

Applicant also respectfully submits that neither Thomas nor Saino discloses an intumescent material that volumetrically expands into a free space between the inner wall of the housing and the armature and permanently embeds the armature in a locking position when the expansion temperature has been reached, as recited by Claim 32. In sharp contract, both Thomas's metal ball 44 and Saino's intumescent means 47 expand within a cylindrical cavity. Furthermore, Thomas fails to teach or suggest that his metal ball 44 is permanently embedded within his cylindrical cavity and dimple 45 after heating. Moreover, none of the remaining references cure these deficiencies.

Consequently, Claim 32 is allowable over the cited references, at least for these reasons.

Notwithstanding these deficiencies, Applicant also submits that the Office Action has failed to establish a *prima facie* case of obviousness against Claim 32.

Thomas discloses a thermally-responsive detent mechanism that holds locking member 12 in its locking position when a certain temperature is exceeded. Thomas opines that his detent mechanism is necessary in order to overcome the possible failure of his spring 37 to hold the locking member 12 in its locking position at high temperatures. *See*, e.g., Col. 4:60 to Col. 6:11. Thomas's detent mechanism includes a spring 46 and a metal ball 44, mounted within a cylindrical cavity in case 9, and a corresponding dimple 45 in locking member 12. Thomas describes the operation of his detent mechanism as follows:

> The diameter and metal of the ball 44 are selected in relation to the diameter of the opening 47 in the case 9 and the metal of the case 9 so that when the strike is subjected to heat and the temperature thereof reaches a predetermined value, the diameter of the opening 47 decreases and the diameter of the ball 44 increases by amounts which cause the wall of the opening 47 and the surface of the ball 44 to frictionally engage sufficiently to prevent movement of the ball 44 out of the dimple 45, e.g. to prevent movement of the ball 44 from the position shown in FIG. 8. With the ball 44 held in the dimple 45, the locking member 12 cannot pivot out of its locking position.
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> Col. 5:16–28.

The Office Action admits that "Thomas fails to disclose that the material is an intumescent material," cites Saino as teaching "the use of an intumescent material 47 within a latching device" and opines that "it would have been obvious to one of ordinary skill in the art at

the time the invention was made to replace the material disclosed by Thomas with an intumescent material since both materials expand when subjected to heat" (Page 6). The Office Action appears to be suggesting that the component of Thomas's detent mechanism that expands when heated, i.e., metal ball 44, could be replaced by Saino's intumescent material 47 and "still allow the latch position to be fixed" (Page 6).

Applicant disagrees. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art.[1] *To wit*, neither reference teaches or suggests that the shear strength of Saino's expanded intumescent material 47 is sufficient to engage Thomas's dimple 45 and hold Thomas's locking member 12 in its locking position. Even assuming, *arguendo*, that Saino's intumescent material 47 is simply added to Thomas's cylindrical cavity in case 9 inboard of spring 46 so that, when heated, Saino's intumescent material 47 would swell, overcome the force of spring 46 and urge metal ball 44 against dimple 45 to hold locking member 12 in its locking condition,[2] this combination still fails to disclose every element recited by Claim 32 (as discussed above).

Accordingly, Applicant submits that Claim 32 is allowable over the references of record. Furthermore, Claims 34–38, depending from Claim 32, are also allowable, at least for the reasons discussed above. Applicant also submits that the cited references fail to teach or suggest many of the features recited by the dependent claims, and, consequently, that these claims are independently allowable.

In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance and should now be passed to issue.

A Notice of Allowance is respectfully solicited.

If any extension of time is required in connection with the filing of this paper and has not been requested separately, such extension is hereby requested.

The Commissioner is hereby authorized to charge any fees and to credit any overpayments that may be required by this paper under 37 C.F.R. §§ 1.16 and 1.17 to Deposit Account No. 50-2036.

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[1] *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007).

[2] *See*, e.g., Saino at Col. 4:43–59.

Respectfully submitted,

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